Claims

1. The use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the manufacture of a medicament for the treatment of Type I diabetes mellitus.

2. The use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the manufacture of a medicament for use in a method of transplantation of cells.

3. The use as claimed in Claim 2, wherein the cells are insulin-producing cells or precursors thereof.

4. The use as claimed in Claim 2 or Claim 3, wherein the cells are islets of Langerhans.

5. The use as claimed in Claim 3, wherein the precursors of insulin-producing cells are stem cells.

6. The use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the manufacture of a medicament for use in a method of engrafting islets of Langerhans.

7. The use as claimed in Claim 6, wherein the islets engraft in the liver.

8. The use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the manufacture of a medicament for use in a method of improving insulin-independency in patients having Type I diabetes mellitus.

9. The use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the manufacture of a medicament for the treatment of instant blood-mediated inflammatory reaction.

10. The use as claimed in any one of Claims 1 to 9, wherein the derivative of melagatran is a prodrug of melagatran.

11. The use as claimed in Claim 10, wherein the prodrug is of the formula

$$R^1O_2C\text{-}CH_2\text{-}(R)Cgl\text{-}Aze\text{-}Pab\text{-}OH,$$

wherein R^1 represents linear or branched C_{1-6} alkyl and the OH group replaces one of the amidino hydrogens in Pab.

12. The use as claimed in Claim 11, wherein R^1 represents methyl, ethyl, n-propyl, i-propyl or t-butyl.

13. The use as claimed in Claim 12, wherein R^1 represents ethyl.

14. A method of treating Type I diabetes mellitus, which comprises administering a therapeutically-effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient in need of such treatment.

15. A method of transplantation of cells, which method comprises the administration of a therapeutically-effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient about to be, being, or having been, subjected to such transplantation.

16. A method as claimed in Claim 15, wherein the cells are insulin-producing cells or precursors thereof.

17. A method as claimed in Claim 15 or Claim 16, wherein the cells are islets of Langerhans.

18. A method as claimed in Claim 16, wherein the precursors of insulin-producing cells are stem cells.

19. A method of engrafting islets of Langerhans, which method comprises administering a therapeutically-effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient about to be, being, or having been, subjected to transplantation of such islets.

20. A method as claimed in Claim 19, wherein the islets engraft in the liver.

21. A method of improving insulin-independency in patients having Type I diabetes mellitus, which method comprises administering a therapeutically-effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient in need of such improvement.

22. A method of treatment of instant blood-mediated inflammatory reaction, which method comprises administering a therapeutically-effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient in need of such treatment.

23. A method as claimed in any one of Claims 14 to 22, wherein the derivative of melagatran is a prodrug of melagatran.

24. A method as claimed in Claim 23, wherein the prodrug is of the formula

$$R^1O_2C\text{-}CH_2\text{-}(R)Cgl\text{-}Aze\text{-}Pab\text{-}OH,$$

wherein R^1 represents linear or branched C_{1-6} alkyl and the OH group replaces one of the amidino hydrogens in Pab.

25. A method as claimed in Claim 24, wherein R^1 represents methyl, ethyl, n-propyl, i-propyl or t-butyl.

26. A method as claimed in Claim 25, wherein R^1 represents ethyl.

27. A pharmaceutical formulation for use in the treatment of Type I diabetes mellitus, which formulation comprises an effective amount of melagatran, or a pharmaceutically-acceptable derivative thereof.

28. Use of melagatran, or a pharmaceutically-acceptable derivative thereof, for the treatment of Type I diabetes mellitus, by administering melagatran, or a pharmaceutically-acceptable derivative thereof, to a patient.

29. A kit of parts comprising components:

(a) a first component comprising melagatran or a pharmaceutically-acceptable derivative thereof; and

(b) a second component comprising cells,

which components (a) and (b) are each provided in a form that is suitable for administration in conjunction with the other.

30. A kit as claimed in Claim 29, wherein the cells are insulin-producing cells or precursors thereof.

31. A kit as claimed in Claim 29 or Claim 30, wherein the cells are islets of Langerhans.

32. A kit as claimed in Claim 30, wherein the precursors of insulin-producing cells are stem cells.

33. A kit of parts comprising:

(I) one of components (a) and (b) as defined in any one of Claims 29 to 32; together with

(II) instructions to use that component in conjunction with the other of the two components.

34. A formulation, use or kit as claimed in any one of Claims 27 to 33 (as appropriate), wherein the derivative of melagatran is a prodrug of melagatran.

35. A formulation, use or kit as claimed in Claim 34, wherein the prodrug is of the formula

$$R^1O_2C\text{-}CH_2\text{-}(R)Cgl\text{-}Aze\text{-}Pab\text{-}OH,$$

wherein R^1 represents linear or branched C_{1-6} alkyl and the OH group replaces one of the amidino hydrogens in Pab.

36. A formulation, use or kit as claimed in Claim 35, wherein R^1 represents methyl, ethyl, n-propyl, i-propyl or t-butyl.

37. A formulation, use or kit as claimed in Claim 36, wherein R^1 represents ethyl.

38. A method of making a kit of parts as defined in any one of Claims 29 to 32 or 34 to 37; which method comprises bringing a component (a), as defined in any one of Claims 29 to 32 or 34 to 37, into association with a component (b), as defined in any one of Claims 29 to 32 or 34 to 37, thus rendering the two components suitable for administration in conjunction with each other.